

CLAIMS

We claim:

1 1. A digital camera that fits within the film cavity of a non-digital
2 camera comprising:

3 a light detector for detecting light due to the opening of the shutter
4 aperture of the non-digital camera; and

5 an imager coupled to the light detector and located adjacent to the
6 shutter aperture of the non-digital camera, said imager sensing radiated
7 energy reflective of the image received through a lens and shutter aperture of
8 the non-digital camera when the light detector detects light due to the
9 opening of the shutter aperture of the non-digital camera, said imager
10 generating signals reflective of the image.

1 2. The digital camera as set forth in claim 1, further comprising a
2 memory for storing digital data reflective of the image.

1 3. The digital camera as set forth in claim 1, further comprising a
2 passgate coupled to the light detector located between the imager and a clock
3 input to the imager, said passgate controlled by the light detector such that
4 when the light detector detects light due to the opening of the shutter
5 aperture of the non-digital camera, the passgate is switched to permit clock
6 signals to reach the imager to driver the imager to output signals reflective of
7 the image.

1 4. The digital camera as set forth in claim 1, wherein the light
2 detector controls power to the imager such that when the light detector
3 detects light due to the opening of the shutter aperture of the non-digital

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4 camera, power is supplied to the imager to generate signals reflective of the
5 image.

1 5. The digital camera as set forth in claim 1, wherein the light
2 detector controls the output from the imager such that when the light
3 detector detects light due to the opening of the shutter aperture of the non-
4 digital camera, output signals reflective of the image are output from the
5 imager.

1 6. The digital camera as set forth in claim 1, further comprising
2 circuitry for performing signal processing on the signals output by imager.

1 7. The digital camera as set forth in claim 1, further comprising at
2 least one output port for outputting image data from the digital camera to an
3 external device.

1 8. The digital camera as set forth in claim 6, wherein the output
2 port comprises a wireless transmitter for transmitting image data to wireless
3 receiver of an external device.

1 9. The digital camera as set forth in claim 6, wherein the output
2 port is coupled to a substantially flat cable that extends outside of the body of
3 the non-digital camera when a film door of the non-digital camera is closed
4 and connects to an external device.

1 10. The digital camera as set forth in claim 6, wherein the output
2 port outputs image in a format compatible with the RS-232 standard.

1 11. The digital camera as set forth in claim 6, wherein the output
2 port couples to a monitor, said digital camera further comprising circuitry
3 that drives the monitor to display the image on the monitor.

1 12. The digital camera as set forth in claim 6, wherein the external
2 device drives a monitor to display the image.

1 13. The digital camera as set forth in claim 6, wherein the external
2 device drives a printer to generate a print of the image.

1 14. The digital camera as set forth in claim 6, wherein the output
2 port operates in accordance with a telephone standard, said digital camera
3 further comprising logic to generate a facsimile transmission that is output
4 through the output port to a coupled telephone line.

1 15. The digital camera as set forth in claim 6, wherein the output
2 port couples to the internet.

1 16. The digital camera as set forth in claim 6, wherein the output
2 port couples to the world wide web.

1 17. The digital camera as set forth in claim 1, further comprising a
2 lens located between the shutter aperture of the non-digital camera and the
3 imager to focus the image received through the shutter aperture onto the
4 imager.

1 18. A method for generating digital images using a non-digital
2 image camera comprising the steps of:
3 specifying an image to be recorded by actuating the shutter aperture of
4 the non-digital camera, the actuation of the shutter aperture opening the

5 shutter to permit light reflective of the image to be received in a film cavity of
6 the non-digital camera;

7 locating an imager and a light detector in the film cavity of the non-
8 digital camera, said light detector controlling the imager such that the imager
9 outputs signals reflective of the image sensed when the light detector detects
10 light due to the opening of the shutter aperture;

11 said imager outputting signals reflective of a digital image sensed.

1 19. The method as set forth in claim 17, further comprising the step
2 of translating the signals to digital data, said digital data reflective of the
3 digital image sensed.

1 20. The method as set forth in claim 18, further comprising the step
2 of formatting the signals reflective of the digital image sensed into data
3 words.

1 21. The method as set forth in claim 17, further comprising the step
2 of storing in memory representations of the signals reflective of the image
3 sensed.

1 22. The method as set forth in claim 17, further comprising the step
2 of processing the signals reflective of the image sensed to modify the image.

1 23. The method as set forth in claim 17, further comprising the step
2 of outputting the signals reflective of the image sensed to an external device.

1 24. The method as set forth in claim 22, wherein the external device
2 is a display device and the step of outputting comprises generating a
3 signals to drive the device in order to display the image.

1 25. The method as set forth in claim 22, wherein the external device
2 is a telephone system and the step of outputting comprises sending a
3 facsimile representation of the image via the telephone system to a facsimile
4 device.

1 26. The method as set forth in claim 22, wherein the external device
2 is an interface that transfers the image to other devices.

1 27. The method as set forth in claim 22, wherein the external device
2 is a system that provides a connection to the internet.

1 28. The method as set forth in claim 22, wherein the external device
2 is a system that provides a connection to the world wide web.

1 29. The method as set forth in claim 22, wherein the step of
2 outputting comprises the step of transmitting information to be output via a
3 wireless connection.